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#### **ABSTRACT**

Sparked by high-profile cases involving children who commit violent crimes, public concerns regarding child delinquents have escalated. Compared with juveniles who first become involved in delinquency in their teens, child delinquents (offenders younger than age 13) face a much greater risk of becoming serious, violent, and chronic juvenile offenders. The Office of Juvenile Justice and Delinquency Prevention (OJJDP) formed the Study Group on Very Young Offenders to examine the prevalence and frequency of offending by children younger than 13. This Study Group identified particular risk and protective factors that are crucial to developing effective early intervention and protection programs for very young offenders. This bulletin focuses on four types of risk and protective factors: individual, family, peer, and school and community. (Contains 95 references.) (GCP)



# Risk and Protective Factors of Child Delinquency

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# Child Delinquency Bulletin Series April 2003

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J. Robert Flores, Administrator

April 2003

### A Message From OUDP

Preventing children from engaging in delinquent behavior is one of OJJDP's primary goals. Early intervention is crucial to achieving this goal, and understanding the factors related to child delinquency is essential to effective early childhood intervention. As part of its effort to understand and respond to these needs, OJJDP formed the Study Group on Very Young Offenders.

This Bulletin, part of OJJDP's Child Delinquency Series, focuses on four types of risk and protective factors: individual, family, peer, and school and community. It is derived from the chapters devoted to these critical areas for prevention and intervention in the Study Group's final report, Child Delinquents: Development, Intervention, and Service Needs.

To succeed, intervention methods designed to prevent child delinquency from escalating into serious and violent juvenile offending must address a range of risk and protective factors. In addition to the factors addressed in this Bulletin, OJJDP is pursuing research to examine the role of religious traditions and training as protective factors in the life of a child.

Preventing delinquency early in a child's life can pay significant dividends by reducing crime rates and decreasing crime-related expenditures of tax dollars. More important, it can help children avoid the consequences of delinquent behavior by increasing their chances of leading law-abiding and productive lives.

# Risk and Protective Factors of Child Delinquency

Gail A. Wasserman, Kate Keenan, Richard E. Tremblay, John D. Coie, Todd I. Herrenkohl, Rolf Loeber, and David Petechuk

Sparked by high-profile cases involving children who commit violent crimes, public concerns regarding child delinquents have escalated. Compared with juveniles whose delinquent behavior begins later in adolescence, child delinquents (offenders younger than age 13) face a greater risk of becoming serious, violent, and chronic juvenile offenders. OJJDP formed the Study Group on Very Young Offenders to examine the prevalence and frequency of offending by children younger than 13. This Study Group identified particular risk and protective factors that are crucial to developing effective early intervention and protection programs for very young offenders.

This Bulletin is part of OJJDP's Child Delinquency Series, which presents the findings of the Study Group on Very Young Offenders. This series offers the latest information about child delinquency, including analyses of child delinquency statistics, insights into the origins of very young offending, and descriptions of early intervention programs and approaches that work to prevent the development of delinquent behavior by focusing on risk and protective factors.

Some aspects of children's behaviors, such as temperament, are established during the first 5 years of life. This foundation, coupled with children's exposure to certain risk and protective factors, influences the likelihood of children becoming delinquent at a young age. However, the identification of these multiple risk and protective factors has proven to be a difficult task. Although no magic solutions exist for preventing or correcting child delinquency, identifying risk and protective factors remains essential to developing interventions to prevent child delinquency from escalating into chronic criminality.

According to the Study Group on Very Young Offenders, a group of 39 experts on child delinquency and child psychopathology convened by the Office of Juvenile Justice and Delinquency Prevention (OJJDP), risk factors for child delinquency operate in several domains: the individual child, the child's family, the child's peer group, the child's school, the child's neighborhood, and the media. Most professionals agree that no single risk factor leads a young child to delinquency. Rather,

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the likelihood of early juvenile offending increases as the number of risk factors and risk factor domains increases.

Although some risk factors are common to many child delinquents, the patterns and particular combination of risk factors vary from child to child. Professionals have learned a great deal about which risk and protective factors are relevant for screening and intervention. For example, most professionals agree that early on in a child's life, the most important risks stem from individual factors (e.g., birth complications, hyperactivity, sensation seeking, temperamental difficulties) and family factors (e.g., parental antisocial or criminal behavior. substance abuse, and poor child-rearing practices). As the child grows older and becomes integrated into society, new risk factors related to peer influences, the school, and the community begin to play a larger role.

Although focusing on risk factors is important, examining protective factors that reduce the risk of delinquency is as important for identifying interventions that are likely to work. For example, some common protective factors against child delinquency and disruptive behavior are female gender, prosocial behavior (such as empathy) during the preschool years, and good cognitive performance (for example, appropriate language development and good academic performance). The proportion of protective factors to risk factors has a significant influence on child delinquency, and protective factors may offset the influence of children's exposure to multiple risk factors.

This Bulletin is based on four chapters from the Study Group's final report, Child Delinquents: Development, Intervention, and Service Needs (Loeber and Farrington, 2001): "Individual Risk and Protective Factors," "Family Risk and Protective Factors," "Peer Factors and Interventions," and "School and Community Risk Factors and Interventions."

#### Child Delinquency Research: An Overview

Historically, delinquency studies have focused on later adolescence, the time when delinquency usually peaks. This was particularly true in the 1990s, when most researchers studied chronic juvenile offenders because they committed a disproportionately large amount of crime. Research conducted during this period by OJJDP's Study Group on Serious and Violent Juvenile Offenders concluded that youth referred to juvenile court for their first delinquent offense before age 13 are far more likely to become chronic offenders than youth first referred to court at a later age. To better understand the implications of this finding, OJJDP convened the Study Group on Very Young Offenders in 1998. Its charge was to analyze existing data and to address key issues that had not previously been studied in the literature. Consisting of 16 primary study group members and 23 coauthors who are experts on child delinquency and psychopathology, the Study Group found evidence that some young children engage in very serious antisocial behavior and that, in some cases, this behavior foreshadows early delinquency. The Study Group also identified several important risk factors that, when combined, may be related to the onset of early offending. The Study Group report concluded with a review of preventive and remedial interventions relevant to child delinquency.

The Child Delinquency Bulletin Series is drawn from the Study Group's final report, which was completed in 2001 under grant number 95–JD–FX–0018 and subsequently published by Sage Publications as *Child Delinquents: Development, Intervention, and Service Needs* (edited by Rolf Loeber and David P. Farrington). OJJDP encourages parents, educators, and the juvenile justice community to use this information to address the needs of young offenders by planning and implementing more effective interventions.

The risk factors for child delinquency discussed in this Bulletin are categorized into four groups: (1) individual, (2) family, (3) peer, and (4) school and community. A greater understanding of these risk and protective factors could serve as the basis for future social policies designed to prevent and control delinquency (see Burns et al., in press, another OJJDP Bulletin in this series).

#### **Individual Risk Factors**

Children's behavior is the result of genetic, social, and environmental factors. In relation to child delinquency, the Study Group defined individual risk and protective factors as an individual's genetic, emotional, cognitive, physical, and social characteristics. These factors are frequently interrelated, yet the underlying mechanism of how this occurs is not fully understood.

#### **Antisocial Behavior**

Early antisocial behavior may be the best predictor of later delinquency. Antisocial behaviors generally include various forms of oppositional rule violation and aggression, such as theft, physical fighting, and vandalism. In fact, early aggression appears to be the most significant social behavior characteristic to predict delinquent behavior before age 13. In one study, physical aggression in kindergarten was the best and only predictor of later involvement in property crimes (Haapasalo and Tremblay, 1994; Tremblay et al., 1994). In contrast, prosocial behavior (such as helping, sharing, and cooperation), as rated by teachers, appeared to be a protective factor, specifically for those who have risk factors for committing violent and property crimes before age 13.

Studies conducted in Canada, England, New Zealand, Sweden, and the United



#### Childhood Risk Factors for Child Delinquency and Later Violent Juvenile Offending

Source: This list is largely based on R. Loeber and D.P. Farrington, eds. 2001. Child

Delinquents: Development, Intervention, and Service Needs. Thousand Oaks, CA: Sage

The following risk factors are discussed in this Bulletin.

#### Individual factors

- Early antisocial behavior
- Emotional factors such as high behavioral activation and low behavioral inhibition
- Poor cognitive development
- Low intelligence
- Hyperactivity

#### Family factors

- Parenting
- Maltreatment
- Family violence
- Divorce
- Parental psychopathology
- Familial antisocial behaviors
- Teenage parenthood

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- Family structure
- Large family size

#### Peer factors

- Association with deviant peers
- Peer rejection

#### School and community factors

- Failure to bond to school
- Poor academic performance
- Low academic aspirations
- Living in a poor family
- Neighborhood disadvantage
- Disorganized neighborhoods
- Concentration of delinquent peer groups
- Access to weapons

States have confirmed that early anti-In another study, the two best predicsocial behavior tends to be the best tors of later antisocial behavior were mothers' ratings of their children as predictor of early-onset delinquency for boys. For example, in a study by difficult to manage at 3 years of age and parents' ratings of behavior problems at Patterson and colleagues, antisocial 5 years of age (White et al., 1990). Most children whose caregivers perceived them as difficult to manage at age 3 did not become delinquents before age 13. However, most children who became delinquents before age 13 had behavior problems that had emerged in the first vears of life.

#### **Emotional Factors**

Although early aggressive behavior is the most apparent and best predictor of later delinquency, other individual factors may contribute to later antisocial

behaviors. By the end of the third year of life, children can express the entire range of human emotions, including anger, pride, shame, and guilt. Parents, teachers, and even peers affect children's socialization of emotional expression and help them learn to manage negative emotions constructively. Thus, how children express emotions, especially anger, early in life may contribute to or reduce their risk for delinquency.

Many studies of delinquency have focused on the concepts of behavioral inhibition and behavioral activation. Behavioral inhibition (in response to a new stimulus or punishment) includes fearfulness, anxiety, timidity, and shyness. Behavioral activation includes novelty and sensation seeking, impulsivity, hyperactivity, and predatory aggression. The Study Group found evidence that high levels of behavioral activation and low levels of behavioral inhibition are risk factors for antisocial behavior. For example, high levels of daring behavior at ages 8-10 predicted convictions and self-reported delinquency before age 21, whereas measures of anxiety and guilt did not (Farrington, 1998). Overall, studies have shown that impulsive, not anxious, boys are more likely to commit delinquent acts at 12 to 13 years of age. More studies are needed to determine whether emotional characteristics in childhood are causes of or simply correlates of later antisocial behavior.

#### **Cognitive Development**

Emotional and cognitive development appear to be associated with children's ability to control social behavior within the first 2 years of life. Evidence suggests that these factors play an important role in the development of early delinquency and may affect the learning of social rules. In addition to traditional measures such as IQ, the Study Group considered cognitive development in terms of language development, social cognition, academic achievement, and neuropsychological function.

behavior was the best predictor of age at first arrest when compared with family social disadvantage, parental monitoring, and parental discipline. Long-term results also indicated that those with an early arrest (before age 13) were most likely to be chronic offenders by age 18 (Patterson, Crosby, and Vuchinich, 1992; Patterson et al., 1998). Likewise, the Cambridge Study in Delinquent Development in London, England, showed that one of the strongest predictors of a conviction between ages 10 and 13 was troublesome behavior between the ages of 8 and 10, as rated by teachers and peers (Farrington, 1986).



#### The Terrible Twos

The Study Group identified evidence linking behavior problems around age 3 with delinquency by age 13. Antisocial behaviors, such as anger and physical aggression, can appear during the first year of life but often peak at the end of the second year after birth. Thus, before age 3, most children engage in behavior that would be considered antisocial at a later age, including physical aggression. However, most children outgrow early problem behavior. The ones who do not outgrow such behavior are of concern here because of the increased risk that they may become child delinquents.

Poor cognitive development and behavior problems during early childhood could explain the association between academic achievement and delinquency. For example, numerous studies have shown that delinquents' verbal IQs tend to be lower than their nonverbal IQs (e.g., Moffitt, 1993). Delinquents also have lower mean global IQs and lower school achievement rates compared with nondelinquents (e.g., Fergusson and Horwood, 1995; Maguin and Loeber, 1996).

Mild neuropsychological deficits present at birth can snowball into serious behavior problems by affecting an infant's temperament (Moffitt, 1993). These deficits can affect children's control of behaviors such as language, aggression, oppositional behavior, attention, and hyperactivity. Basic cognitive deficits may also be associated with impaired social cognitive processes, such as failure to attend to appropriate social cues (e.g., adults' instructions, peers' social initiations).

#### **Hyperactivity**

Studies have shown that restless, squirmy, and fidgety children are more likely to be involved in later delinquent



behavior (e.g., Farrington, Loeber, and Van Kammen, 1990; Lynam, 1997). Clinical studies of hyperactive children have shown that they also are at high risk of delinquency (e.g., Loeber et al., 1995). For example, motor restlessness (hyperactive or hyperkinetic behavior), as rated by kindergarten teachers, was a better predictor of delinquency between ages 10 and 13 than lack of prosocial behavior and low anxiety (Tremblay et al., 1994). Another study concluded that hyperactivity leads to delinquency only when it occurs with physical aggression or oppositional behavior (Lahey, McBurnett, and Loeber, 2000).

#### **Family Risk Factors**

Children and their families defy narrow descriptions. Social, environmental, and family risk factors tend to cluster, and any number of them can occur together within the same family. Understanding the role and influence of each of these factors is a difficult task. For example, early child offending may develop through several pathways. For some children, the primary risk factor may be a family risk factor such as lack of parental supervision; for others, it may be an individual risk factor such as a diagnosis of attention deficit hyperactivity disorder (Cicchetti and Rogosch, 1996).

#### **A Question About Biological Factors**

All behavior, including delinquency, is influenced by biological factors. These factors include not only physical strength but also brain functioning, such as neurotransmitters that pass signals to the brain. Serotonin receptors, for instance, are neurotransmitters that have been associated with impulsive behavior (Goldman, Lappalainen, and Ozaki, 1996). Other biological factors have also been associated with delinquency. Compared to nondelinquents, delinquents tend to have a lower heart rate and a lower skin response (Raine, 1993), which are measures of autonomic nervous activity. Another line of research has concentrated on hormones, including testosterone. However, a high level of testosterone during the elementary school years is not known to predict later delinquency. Currently, research on genes has come as far as the identification of proteins associated with neurotransmitters, but it is unlikely to shed light on complex processes such as delinquency (Rowe, 2002). In summary, it is far from clear to what extent biological processes determine delinquency at a young age.



Studies have shown that inadequate child-rearing practices, home discord, and child maltreatment are associated with early-onset delinquency (e.g., Derzon and Lipsey, 2000). In addition, the strongest predictors of early-onset violence include family size and parental antisocial history. Early temperamental difficulties in the child coupled with parental deficiencies that interfere with proactive parenting are also thought to be important in the development of early-onset behavior problems.

In looking at the clustering of family risk factors, one goal is to identify which combinations of risk factors promote early misbehavior because, more than likely, early misbehavior is the result of an accumulation of a number of factors. The number of risk factors and stressors and the length of exposure to them have a strong impact on child behavior (e.g., Tiet et al., 1998; Williams et al., 1990).

A number of social adversities in families can affect children's delinquency. These factors include parenting, maltreatment, family violence, divorce, parental psychopathology, familial antisocial behaviors, teenage parenthood, family structure, and family size.

#### **Parenting**

Inadequate parenting practices are among the most powerful predictors of early antisocial behavior (e.g., Hawkins et al., 1998). Compared with families in which the children do not have conduct problems, families of young children with conduct problems have been found to be eight times more likely to engage in conflicts involving discipline, to engage in half as many positive interactions, and, often unintentionally, to reinforce negative child behavior (Gardner, 1987; Patterson and Stouthamer-Loeber, 1984). Three specific parental practices are particularly associated with early conduct problems: (1) a high level of parent-child conflict, (2) poor monitoring, and (3) a low level of positive involvement (Wasserman et al.,

1996). In the Pittsburgh Youth Study, the co-occurrence of low levels of monitoring and high levels of punishment increased the risk of delinquency in 7-to 13-year-old boys. Conversely, attachments to conventional parents and to society's institutions are hypothesized to protect against developing antisocial behavior (Hirschi, 1969).

#### Maltreatment

Child maltreatment or abuse commonly occurs with other family risk factors associated with early-onset offending. Focusing specifically on the relationship between physical abuse and children's aggression, one study suggests that 20 percent of abused children become delinquent before reaching adulthood (Lewis, Mallouh, and Webb, 1989). Clearly, most physically abused children do not go on to become antisocial or violent. However, one study that compared children without a history of abuse or neglect with children who had been abused or neglected found that the latter group accrued more juvenile and adult arrests by the age of 25 (Widom, 1989). Abused or neglected children also offended more frequently and began doing so at earlier ages.

#### **Family Violence**

Each year, approximately 3.3 million children witness physical and verbal spouse abuse (Jaffe, Wolfe, and Wilson, 1990). Witnessing domestic violence has been linked to increased child behavior problems, especially for boys and younger children (Reid and Crisafulli, 1990). Little is known about the age range in which children may be most vulnerable or how long associations persist. In most families, when the woman is battered, children are also battered (McKibben, De Vos, and Newberger, 1989). The co-occurrence of child abuse and witnessing domestic violence affects children's adjustment more than twice as much as witnessing domestic violence alone (Hughes, Parkinson, and Vargo, 1989). Other

factors that impose additional risk in violent families include a high incidence of other behavior problems (e.g., alcohol abuse and incarceration) in male batterers. Maternal psychological distress may also expose children to additional indirect risks, such as the mother being emotionally unavailable to the children (e.g., Zuckerman et al., 1995).

#### **Divorce**

Compared with boys whose parents remained married, boys whose parents divorced have been found to be more likely to have continuing problems with antisocial, coercive, and noncompliant behaviors through age 10 (Hetherington, 1989). As with many family factors, establishing the exact effects of divorce on children is difficult because of other co-occurring risks, such as the loss of a parent, other related negative life events (e.g., predivorce child behavior problems, family conflict, decrease in family income), and a parent's subsequent remarriage. When these related factors are considered, the impact of divorce itself is substantially less.

#### **Parental Psychopathology**

High rates (as high as 45 percent) of parental antisocial personality disorder have been consistently reported for parents of boys (including preadolescents) referred for conduct problems (e.g., Lahey et al., 1988). Similar rates occurred for parental substance abuse and depression (Robins, 1966). Depressed parents show many parenting deficiencies associated with increased antisocial behaviors in children, such as inconsistency, irritability, and lack of supervision (Cummings and Davies, 1994). Parental psychopathology has been linked to increased rates of psychiatric disorder among school-aged children (Costello et al., 1997). The Pittsburgh Youth Study found that the association between delinquency and parental anxiety or depression was stronger in younger than in older children (Loeber et al., 1998).



#### Familial Antisocial Behaviors

A long history of research demonstrates that aggressive behavior and criminality are more prevalent in some families than in others. For example, the Cambridge Study in Delinquent Development, which followed 411 families, found that offending was strongly concentrated in a small group of families and that approximately 5 percent of the families accounted for about half of the juvenile criminal convictions (West and Farrington, 1977).

Antisocial adults tend to select antisocial partners (e.g., Farrington, Barnes, and Lambert, 1996). Overall, antisocial parents show increased levels of family conflict, exercise poorer supervision, experience more family breakdown, and direct more hostility toward their children. In addition, having an antisocial sibling also increases a child's likelihood of antisocial behaviors (e.g., Farrington, 1995). The influences of siblings are stronger when the siblings are close in age.

#### **Teenage Parenthood**

Being born to a teenage mother has been found to strongly predict offending in adolescence (Conseur et al., 1997), although much of this effect may stem from the mother's own antisocial history and involvement with antisocial partners (Rutter, Giller, and Hagell 1998).

#### **Family Structure**

Many single parents are able to raise their children very well. However, children from single-mother households are at increased risk for poor behavioral outcome (Pearson et al., 1994; Vaden-Kiernan et al., 1995; McLanahan and Booth, 1989; Sampson, 1987), even controlling for the fact that single-mother households on average have fewer economic resources. Other factors could explain this relationship. Especially as compared with partnered women, single mothers report more mental health problems (e.g., Guttentag, Salasin, and

Belle, 1980), have higher levels of residential mobility (McLanahan and Booth, 1989; McCormick, Workman-Daniels, and Brooks-Gunn, 1996), and have fewer resources to monitor their children's activities and whereabouts. Each of these factors on its own contributes to increased levels of early childhood behavior problems.

#### Family Size

The more children in a family, the greater the risk of delinquency. The Cambridge Study found that, compared with boys who had fewer siblings, boys who had four or more siblings by the age of 10 were twice as likely to offend, regardless of the parents' socioeconomic status (West and Farrington, 1973). These associations may be related to diminished supervision in larger families.

#### **Peer Risk Factors**

Peer influences on child delinquency usually appear developmentally later than do individual and family influences. Many children entering school, for example, already show aggressive and disruptive behaviors. Two major mechanisms associated with peer factors or influences are association with deviant peers and peer rejection.

# Association With Deviant Peers

Association with deviant peers is related to increased co-offending and, in a minority of cases, the joining of gangs. Since a 1931 report showing that 80 percent of Chicago juvenile delinquents were arrested with co-offenders, empirical evidence has supported the theory that deviant peer associations contribute to juvenile offending (Shaw and McKay, 1931). The unresolved question is whether deviant peers model and reinforce antisocial behaviors or whether the association with deviant peers is simply another manifestation of a child's predisposition to delinquency. In other

#### Sibling Influences

Based on data from the 1979 National Longitudinal Survey of Youth, a number of publications have underscored the role played by siblings in influencing delinquent behavior in both the domains of family and peer influence. For example, compared with teens with lower rates of offending, teens with high rates of offending were more likely to have siblings who also committed delinquent acts at a high rate. Some studies speculate that older siblings who are prone to delinquent behavior may reinforce antisocial behavior in a younger sibling, especially when there is a close, warm relationship (Rowe and Gulley, 1992).

words, do "birds of a feather flock together" or does "bad company corrupt"?

The Study Group found that a strong case could be made that deviant peers influence nondelinquent juveniles to become delinquent. For example, according to data from the National Youth Survey on a representative sample of U.S. juveniles ages 11 to 17, the most frequent pattern was a child moving from association with nondelinquent peers to association with slightly deviant peers, and then on to commission of minor offenses. More frequent association with deviant peers and more serious offending followed, leading to the highest level of association with deviant peers (Elliott and Menard, 1996; Keenan et al., 1995).

Deviant peers influence juveniles who already have some history of delinquent behavior to increase the severity or frequency of their offending. A few studies of children younger than 14 support this hypothesis. For example, in a study of Iowa juveniles, involvement in the juvenile justice system was highest for those who engaged in disruptive behavior and associated with deviant peers at a young age (Simons et al., 1994). The Study Group concluded that deviant



peers contribute to serious offending by child delinquents during the period of their transition to adolescence.

Although an extreme form of association with deviant peers, gangs provide a ready source of co-offenders. Not surprisingly, gang membership reflects the highest degree of deviant peer influence on offending. The Rochester Youth Development Study, the Denver Youth Survey, and the Seattle Social Development Project have all shown that gangs appear to exert a considerable influence on the delinquent behavior of individual members. Juveniles are joining gangs at younger ages, and the role of gangs in crimes committed by youthful offenders appears to be an increasing problem (Howell, 1998). In the case of violence, even after accounting for other risk factors (such as association with delinquent peers who are not gang members, family poverty, lack of parental supervision, and negative life events), gang membership still has the strongest relationship with self-reported violence (Battin et al., 1998).

#### **Peer Rejection**

The evidence that peer rejection in childhood is a risk factor for antisocial behaviors is relatively new compared with evidence about association with deviant peers. Recent findings have shown that young aggressive children who are rejected by peers are at significantly greater risk for later chronic antisocial behaviors than children who are not rejected, whether or not they were aggressive early on. For example, one study found that peer rejection in third grade predicted increasingly greater antisocial behaviors from sixth grade onward, even when boys' earlier aggressiveness was accounted for in the predictions (Coie et al., 1995). The frequency of violent offending in adolescence was greater for these rejected, aggressive juveniles, and they were more likely to persist in violent offending in early adulthood. In the early school years, peer rejection accentuates the relation between early attention and

hyperactivity problems and conduct problems in fourth grade.

One explanation for the role of peer rejection in increasing antisocial behaviors is that it leads to greater suspiciousness of other people's motives as hostile and hence to greater aggression in response. A second explanation is that rejection causes children to have fewer positive social options and, consequently, to become part of lower status and deviant peer groups. Rejected, aggressive children are more likely than others to be members of deviant peer groups and tend to be peripheral members of these groups (Bagwell et al., 2000). Their tenuous sense of belonging may dispose them to engage in more antisocial activity in an effort to gain standing in these groups.

Peer rejection and deviant peers are mediating factors rather than primary causes of child delinquency. As shown in the diagram (on page 8), early community, family, and individual risk factors can lead to early aggressive and disruptive behaviors. The already "atrisk" child then enters school, where peer risk factors can culminate in preadolescent or very early adolescent serious offending. The Study Group concluded that three factors combine to account for a juvenile's accelerated movement toward more serious offending in early adolescence:

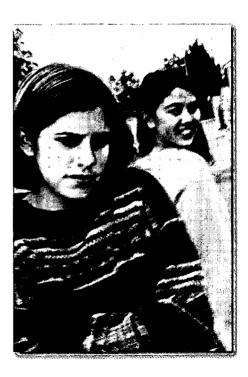
- The high-risk juvenile's own antisocial tendencies.
- The negative consequences of peer rejection resulting from these tendencies.
- The resulting deviant peer associations.

The Study Group believes that peer influence is an important mediating factor in child delinquency. Research suggests that peer influence has an impact on delinquency in two ways: (1) the initial offending of relatively late starters and (2) the escalation of serious offending among very early starters.

# School and Community Risk Factors

Few studies have addressed risk factors that emerge from young children's socialization in schools and communities. The Study Group focused on a social development model integrating insights from current theories that consider the influence of community and schools on child delinquents (Catalano and Hawkins, 1996; Farrington and Hawkins, 1991; Hawkins and Weis, 1985). The model proposes that socialization involves the same processes in producing either prosocial or antisocial behaviors. These processes include the following:

- Children's opportunity for involvement in activities and interactions with others.
- Children's degree of involvement and interaction with others.
- Children's ability (skills) to participate in these involvements and interactions.
- Reinforcements received from individuals for children's performance in involvements and interactions with others.





#### **School Factors**

The Study Group found that the failure to bond to school during childhood can lead to delinquency. In addition, as stated above, early neurological deficiencies, when combined with the failure of family, school, and community to provide adequate socialization, lead to early-onset offending that persists throughout life. A specific school risk factor for delinquency is poor academic performance. A meta-analysis of more than 100 studies examined the relationship between poor academic performance and delinquency and found that poor academic performance is related to the prevalence, onset, frequency, and seriousness of delinquency (Maguin and Loeber, 1996). In young children ages 8 to 11, academic performance has been related to serious later delinquency (Loeber et al., 1998). Even when individual intelligence and attention problems are taken into account, academic performance remains a predictor of delinquency.

Children with weak bonds (low commitment) to school, low educational aspirations, and poor motivation are also at

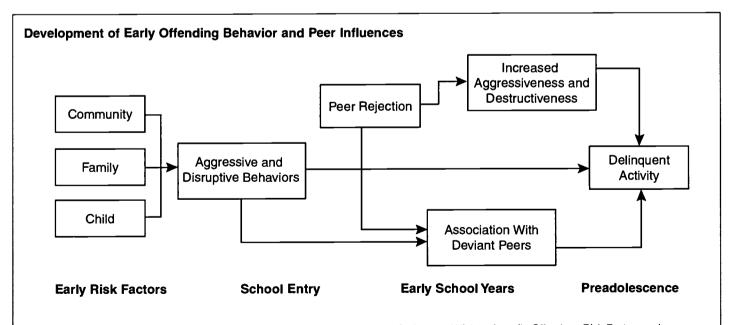
risk for general offending and for child delinquency (e.g., Hawkins et al., 1998; Le Blanc, Coté, and Loeber, 1991). It is likely that children who perform poorly on academic tasks will fail to develop strong bonds to school and will have lower expectations of success. As a result, academic achievement and school bonding are, in many ways, interdependent. For example, one study found that boys who engage in delinquency are less committed to school and are also more likely to have "shorter plans" for their schooling. These boys described themselves as bad students (Le Blanc et al., 1991).

#### **Community Factors**

Numerous risk factors for young children's offending lie within the community domain. For example, findings from studies of childhood exposure to family poverty have been very consistent. Children raised in poor, disadvantaged families are at greater risk for offending than children raised in relatively affluent families (e.g., Farrington, 1989, 1991, 1998). Disadvantages at the neighborhood level are also of primary

importance in the development of antisocial behaviors (Catalano and Hawkins, 1996). Disorganized neighborhoods with few controls may have weak social control networks that allow criminal activity to go unmonitored and even unnoticed (e.g., Elliott et al., 1996; Sampson and Lauritsen, 1994). In terms of violent crimes, one study concluded that social disorganization and concentrated poverty within the community lead to residents' decreased willingness to intervene when children are engaging in antisocial/ unlawful acts, further contributing to a greater likelihood of violence within neighborhoods (Sampson, Raudenbush, and Earls, 1997).

Certain residential areas may support greater opportunities for antisocial learning. For example, disadvantaged inner-city neighborhoods are often characterized by a predominance of delinquent peer groups and gangs that draw young people into crime (Sutherland and Cressey, 1970). Juveniles living within high-crime neighborhoods are often exposed to norms favorable to crime and are at high risk for offending (Developmental Research and Programs,



Source: J.D. Coie and S.M iller-Johnson. 2001. Peer factors and interventions. In Serious and Violent Juvenile Offenders: Risk Factors and Successful Interventions, edited by R. Loeber and D. P. Farrington. Thousand Oaks, CA: Sage Publications, Inc., pp. 191–209.



#### Who's in Control at School?

Schools play an important role in the socialization of children and the development of antisocial behavior. When schools are poorly organized and operated, children are less likely to value their education and do well on academic tasks and more likely to experience peer influences that promote delinquency and opportunities for antisocial behavior (Gottfredson, 2001). For example, schools with fewer teacher resources and large enrollments of students have higher levels of teacher victimization by pupils. Teacher victimization is also higher in schools with lower cooperation between teachers and administrators and with poor rule enforcement. Furthermore, poor rule enforcement within schools has been associated with higher levels of student victimization. Disciplinary problems are also more common in schools with less satisfied teachers (Ostroff, 1992). Although much more research is needed on the relationship between school organization and processes and children's delinquency, available evidence suggests that, in addition to those already noted, several other specific school characteristics may be linked to antisocial behaviors of students, including poor student-teacher relations, norms and values supporting antisocial behaviors, and poorly defined rules and expectations for appropriate conduct.

1996). In addition, having ready access to weapons generally increases the risk for violence (Brewer et al., 1995).

#### Interventions

Although the Study Group's findings concerning interventions for child delinquency will be discussed more fully in *Treatment, Services, and Intervention Programs for Child Delinquents* (Burns et al., 2003), the following brief overview of the issues associated with

intervention focuses on the risk factors just discussed. In general, the Study Group found that the number of adequately designed experimental interventions is insufficient to guide policymakers in their efforts to prevent child delinquency. The lack of interventions targeting antisocial behaviors in young children is particularly conspicuous. The Study Group believes focusing on children's early years is essential to better understand the socialization failures that lead to juvenile delinquency

and, eventually, criminal behavior in adulthood.

#### Individual

If the impulse control necessary to avoid trouble is learned largely during the preschool years, the best time to help those who have difficulty in acquiring this control would be during the "sensitive period" of early childhood. It is difficult to imagine that later interventions would have nearly as much effect. Instead of looking for the onset of aggression and antisocial behaviors after children enter school, it is more important to focus on the preschool years, when clearly much of the development of impulse control is taking place (e.g., Broidy, Nagin, and Tremblay, 1999; Tremblay et al., 1998).

#### **Family**

Several types of programs provide family-based interventions. For example, Olds and colleagues (1998) reported on nurses' home visits to unmarried women living in households with low socioeconomic status during pregnancy to the end of the second year after birth. These visits subsequently had a positive effect on the 15-year-old children's reports of arrests, convictions, violations



#### Violence and the Media

Some studies have shown that antisocial behaviors, such as violence. can be learned by viewing violence in the media. For example, children exposed to high levels of television violence at age 8 were found to be more likely to behave aggressively at that age and subsequently, up to age 30 (Eron and Huesmann, 1987). In addition, children of parents who frequently watched violence on television and showed aggression were found to be more likely than other children to exhibit aggression and to prefer violent programs (Huesmann and Miller, 1994).



#### **Bad Company**

Sometimes even the best intentions go astray. The fact that antisocial juveniles are often grouped together in intervention programs may, in fact, promote friendships and alliances among these juveniles and intensify delinquent behavior rather than reduce it (e.g., McCord, 1997; Dishion, McCord, and Poulin, 1999). For example, group discussions among antisocial peers may inadvertently reinforce antisocial attitudes and promote antisocial friendships that may continue outside group sessions.

of probation, consumption of alcohol, sexual activity, and running away from home. Earlier reports (Olds et al., 1997; Olds et al., 1986) had shown that this intervention also reduced the incidence of childhood injuries and child abuse and neglect.

Many family-based interventions that focus on issues such as spousal violence and divorce conflict disregard children completely or deal with them only in the abstract. Conversely, interventions for reducing aggression in young children do not always target family issues, such as domestic violence or parental psychopathology, that may contribute to the child's behavior problems. Focused, family-based approaches, such as Parent Management Training (Wasserman and Miller, 1998), have helped reduce the risk of poor family management practices and physically abusive behavior, which can contribute to antisocial behaviors in children. Nevertheless, a lack of sensitivity to cooccurring risk factors has generally led to interventions that are too narrowly focused. As a result, they fail to address adequately the multiple sources of risk for children in family life.

#### **Peers**

Interventions to reduce antisocial behaviors associated with peer influence

should focus on reducing contact with deviant peers for juveniles predisposed to antisocial behaviors and on promoting the development of prosocial skills (e.g., skills for resolving peer conflicts) (Hawkins and Weis, 1985). Studies have shown that peer relations training (in combination with parent training) reduces children's involvement with deviant peers during preadolescence, thus helping to protect them from subsequent involvement in delinquent activities.

#### School

Several types of school programs have shown promise as interventions for reducing aggressive behavior in the classroom. For example, evaluations of the Good Behavior Game showed that proactive behavior management can positively affect the long-term behavior of the most aggressive elementary school children (Murphy, Hutchinson, and Bailey, 1983; Kellam and Rebok, 1992; Kellam et al., 1994). The Seattle Social Development Project has also demonstrated effectiveness in reducing disruptive behavior in children (Hawkins et al., 1992; Hawkins, Von Cleve, and Catalano, 1991; Hawkins et al., 1999; O'Donnell et al., 1995). Numerous schools have also developed social competence curriculums to promote norms against aggressive, violent, and other antisocial behaviors (e.g., Greenberg, 1997). Other efforts include conflict resolution and violence prevention curriculums, bullying prevention programs, multicomponent classroom programs to improve academic achievement and reduce antisocial behaviors, afterschool recreation programs, and mentoring programs.

#### Community

Because most studies have not specifically focused on child delinquency, surprisingly little is known about community risk factors for child delinquency. Several community approaches for preventing and reducing juvenile crime have been developed in recent years (e.g., Brewer et al., 1995; National Crime Prevention Council, 1994). Most take a comprehensive approach to addressing behavior across several risk domains, but their effect on child delinquency remains to be demonstrated. Multicomponent instruction programs have been developed in several big cities, and these programs will be discussed in *Treatment, Services, and Intervention Programs for Child Delinquents* (Burns et al., 2003).

#### **Summary**

The Study Group stresses that the focus on risk factors that appear at a young age is the key to preventing child delinquency and its escalation into chronic criminality. By intervening early, young children will be less likely to succumb to the accumulating risks that arise later in childhood and adolescence and less likely to incur the negative social and personal consequences of several years of disruptive and delinquent behaviors.

Child delinquency usually stems from a combination of factors that varies from child to child. No single risk factor is sufficient to explain it. To develop effective methods for preventing child delinquency and its escalation into serious and violent juvenile offending, intervention methods must account for the wide range of individual, family, peer. school, and community risk factors. Some effective intervention programs that focus on reducing persistent disruptive behavior in young children have reduced later serious, violent, and chronic offending. Some interventions focus on parent behaviors that increase the risk of persistent disruptive behavior in children. Peer relations training and school/classroom programs have also shown some promise. Still, many gaps exist in our knowledge about the development of child delinquency, the risk and protective factors that contribute to it, and effective prevention and intervention methods. Addressing these gaps offers an exceptional opportunity to reduce overall crime levels



and to decrease future expenditures of tax dollars.

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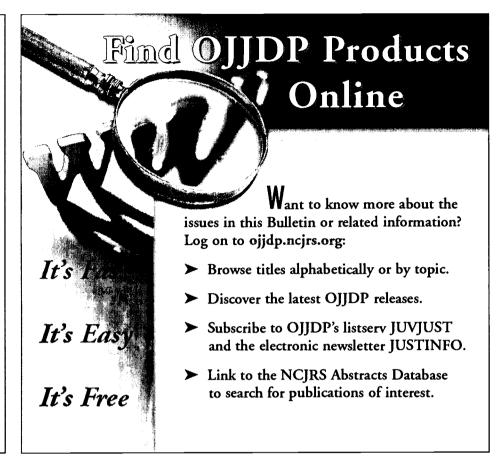
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